AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of diagnosis of a transmissible spongiform encephalopathy (TSE) or the possibility thereof in a subject suspected of suffering from the TSE, which comprises subjecting a sample of a body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum taken from the subject to mass spectrometry, thereby to determine a test amount of a polypeptide in the sample, wherein the polypeptide is differentially contained in the body fluid of TSE-infected subjects and non-TSE-infected subjects, ~~and has a molecular weight in the range of from 1,010-31,800;~~ and is selected from the group consisting of

(a) a polypeptide having a molecular weight of about 1010, 1100, 1125, 1365, 3295, 3645, 3890, 3970, 3990, 4030, 4294, 4315, 4436, 4478, 4780, 5820, 6200, 6700, 7520, 7574, 7630, 7770, 7930, 7975, 7980, 8020, 8600, 8936, 9107, 9145, 9185, 9454, 9950, 10075, 10220, 10250, 11600, 11730, 11800, 13375, 13550, 14043, 15000, 15200, 15400, 15600, 15900, 17839, 30000, 31000 or 31800 Da;

(b) cystatin C; and

(c) a hemoglobin, a hemoglobin chain, or a truncated chain or fragment thereof which exhibits an immunological reaction to an antibody to bovine hemoglobin;

comparing the test amount of the polypeptide in the sample to a reference amount of the polypeptide, wherein the reference amount of the polypeptide represents no TSE infection; ~~and determining whether the test amount is consistent with a diagnosis of TSE~~

and wherein an increase or decrease in the polypeptide in the subject's body fluid compared to the reference indicates TSE in the subject.

2. (Currently Amended) ~~A~~ The method according to Claim 1, in which the polypeptide is present in the body fluid of TSE-infected subjects and not present in the body fluid of non-TSE-infected subjects, whereby the presence of the polypeptide in a body fluid sample is indicative of TSE.

3. (Currently Amended) ~~A~~ The method according to Claim 1, in which the polypeptide is not present in the body fluid of TSE-infected subjects and present in the body fluid of non-TSE-infected subjects, whereby the non-presence of the polypeptide in a body fluid sample is indicative of TSE.

4. (Currently Amended) ~~A~~ The method according to Claim 1, in which the mass spectrometry is laser desorption/ionization mass spectrometry.

5. (Currently Amended) ~~A~~ The method according to Claim 4, in which the sample is adsorbed on a probe or on a protein chip array having an immobilized metal affinity capture (IMAC), hydrophobic, strong anionic or weak cationic exchange surface capable of binding the polypeptide.

6. (Currently Amended) ~~A~~ The method according to Claim 4, in which the

polypeptide is determined by surface-enhanced laser desorption/ionization (SELDI) and time of flight mass spectrometry (TOF-MS).

Claim 7 (Canceled)

8. (Currently Amended) ~~A~~ The method according to Claim 1, in which a plurality of peptides is determined in the sample.

9. (Currently Amended) ~~A~~ The method according to Claim 1, in which the TSE is Creutzfeldt-Jakob disease (CJD).

10. (Currently Amended) ~~A~~ The method according to Claim 9, in which the TSE is sporadic Creutzfeldt-Jakob Disease (CJD) or variant Creutzfeldt-Jakob Disease (CJD).

11. (Currently Amended) ~~A~~ The method according to Claim 9, in which one or more polypeptides having a respective molecular weight of about 4780, about 6700, about 8600 or about 13375 Da is determined, and the presence of one or more of such polypeptides is indicative of CJD.

12. (Currently Amended) ~~A~~ The method according to Claim 9 in which one or more polypeptides having a respective molecular weight of about 3970, about 3990, about 4294, about 4478, about 10075, about 11730, about 14043 or about 17839 Da is

determined, and the absence of one or more of such polypeptides is indicative of CJD.

13. (Currently Amended) ~~A~~ The method according to Claim 9, in which a polypeptide having a molecular weight of about 7770 Da is determined, and the presence of such polypeptide is indicative of CJD.

14. (Currently Amended) ~~A~~ The method according to Claim 9, in which a polypeptide having a molecular weight of about 3295, about 4315, about 4436, about 6200, about 8936, about 9107, about 9145, about 9185, about 9454 or about 13550 Da is determined, and the absence or decreased amount of one or more of such polypeptides is indicative of CJD.

15. (Currently Amended) ~~A~~ The method according to Claim 9, in which a polypeptide having a molecular weight of about 7574, about 7930, about 7975 or about 8020 Da is determined, and the presence or increased amount of one or more of such polypeptides is indicative of ~~CID~~ CJD.

16. (Currently Amended) ~~A~~ The method according to Claim 1, in which the TSE is Bovine Spongiform Encephalopathy (BSE).

17. (Currently Amended) ~~A~~ The method according to Claim 16, in which the polypeptide has a molecular weight of about 10220 Da, and the presence of the

polypeptide is indicative of BSE.

18. (Currently Amended) ~~A~~ The method according to Claim 16, in which one or more polypeptides having a respective molecular weight of about 1010, 1100, 1125, 1365, 3645, 4030, 3890, 5820, 7520, 7630, 7980, 9950, 10250, 11600, 11800, 15000, 15200, 15400, 15600, 15900, 30000, 31000 and 31800 Da is determined, and the differential expression of one or more of such polypeptides is indicative of BSE.

19. (Currently Amended) ~~A~~ The method according to Claim 1, in which the TSE is scrapie.

20. (Withdrawn) A method of diagnosis, prognosis or therapy which comprises use of a polypeptide which is differentially contained in a body fluid of TSE-infected subjects and non-infected subjects, the polypeptide having a molecular weight in the range of from 1000 to 100000 and being determinable by mass spectrometry.

21. (Currently Amended) A method of diagnosis, prognosis or therapy of a transmissible spongiform encephalopathy (TSE) ~~which comprises use of~~ comprising contacting a material which recognizes, binds to or has affinity for a polypeptide which is differentially contained in a body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum of TSE-infected subjects and non-

infected subjects, the polypeptide ~~having a molecular weight in the range of from 1,010-31,800~~ being selected from the group consisting of

(a) a polypeptide having a molecular weight of about 1010, 1100, 1125, 1365, 3295, 3645, 3890, 3970, 3990, 4030, 4294, 4315, 4436, 4478, 4780, 5820, 6200, 6700, 7520, 7574, 7630, 7770, 7930, 7975, 7980, 8020, 8600, 8936, 9107, 9145, 9185, 9454, 9950, 10075, 10220, 10250, 11600, 11730, 11800, 13375, 13550, 14043, 15000, 15200, 15400, 15600, 15900, 17839, 30000, 31000 or 31800 Da;

(b) cystatin C; and

(c) a hemoglobin, a hemoglobin chain, or a truncated chain or fragment thereof which exhibits an immunological reaction to an antibody to bovine hemoglobin;

and being determinable by mass spectrometry, wherein the amount of polypeptide in a sample is compared to a reference amount of polypeptide wherein the reference amount of polypeptide represents no TSE infection.

22. (Currently Amended) ~~A~~ The method according to Claim 21, in which the material is an antibody or antibody chip.

23. (Withdrawn) An assay device for use in the diagnosis of TSE which comprises a plate having a location containing a material which recognizes, binds to or has affinity for a polypeptide which is differentially contained in a body fluid of TSE-infected subjects and non-infected subjects, the polypeptide having a molecular weight in the range of from 1000 to 100000 and being determinable by mass spectrometry.

24. (Withdrawn) An assay device for use in the diagnosis of TSE, which comprises a plate having a location containing an antibody that is specific for cystatin C.

25. (Withdrawn) An assay device for use in the diagnosis of variant CJD, which comprises a plate having a location containing an antibody that is specific for cystatin C and useful in the diagnosis of variant CJD.

26. (Withdrawn) An assay device for use in the diagnosis of sporadic CJD, which comprises a plate having a location containing an antibody that is specific for cystatin C and useful in the diagnosis of sporadic CJD.

27. (Withdrawn) An assay device for use in the diagnosis of BSE, which comprises a plate having a location containing an antibody that is specific for a hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof having an immunological reaction to antibodies specific for bovine hemoglobin and useful in the diagnosis of BSE.

28. (Withdrawn) An assay device for use in the diagnosis of a TSE comprising a solid substrate having attached thereto an antibody that is specific for any of the following:

(i) a polypeptide that is differentially contained in the body fluid of TSE-

infected subjects and non-TSE-infected subjects, and has a molecular weight in the range of from 1000 to 100000;

(ii) a polypeptide that is differentially contained in the body fluid of TSE-infected subjects and non-TSE-infected subjects, and is selected from those having a respective molecular weight of about 1010, 1100, 1125, 1365, 3645, 4030, 3890, 5820, 7520, 7630, 7980, 9950, 10250, 11600, 11800, 15000, 15200, 15400, 15600, 15900, 30000, 31000 and 31800 Da

(iii) cystatin C;

(iv) a hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof which exhibits an immunological reaction to an antibody to bovine hemoglobin and is differentially contained in the body tissue of bovine TSE-infected subjects and non-bovine non-TSE-infected subjects.

29. (Currently Amended) A kit for ~~use in~~ diagnosis of TSE, comprising a probe for receiving a sample of body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma, and serum, and for placement in a mass spectrometer, thereby to determine a test amount of a polypeptide in the sample, wherein the polypeptide is differentially contained in the body fluid of TSE-infected subjects and non-TSE-infected subjects, and ~~has a molecular weight in the range of from 1000 to 100000~~ is selected from the group consisting of

(a) a polypeptide having a molecular weight of about 1010, 1100, 1125, 1365, 3295, 3645, 3890, 3970, 3990, 4030, 4294, 4315, 4436, 4478, 4780, 5820, 6200, 6700, 7520,

7574, 7630, 7770, 7930, 7975, 7980, 8020, 8600, 8936, 9107, 9145, 9185, 9454, 9950, 10075, 10220, 10250, 11600, 11730, 11800, 13375, 13550, 14043, 15000, 15200, 15400, 15600, 15900, 17839, 30000, 31000 or 31800 Da;

(b) cystatin C; and

(c) a hemoglobin, a hemoglobin chain, or a truncated chain or fragment thereof which exhibits an immunological reaction to an antibody to bovine hemoglobin;

wherein diagnosis of TSE is determined by comparing the test amount of polypeptide to a reference amount of polypeptide, wherein the reference amount of polypeptide represents no TSE infection.

30. (Currently Amended) ~~A~~ The kit according to Claim 29, in which the probe contains an adsorbent for adsorption of the polypeptide.

31. (Currently Amended) ~~A~~ The kit according to Claim 29, further comprising a washing solution for removal of unbound or weakly bound materials from the probe.

32. (Currently Amended) A method of diagnosis of a transmissible spongiform encephalopathy (TSE) or the possibility thereof in a subject suspected of suffering from the TSE, which comprises determining a test amount of ~~a polypeptide~~ cystatin C in a sample of body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum taken from the subject, wherein the cystatin C ~~polypeptide~~ is differentially contained in the body fluid of TSE-infected subjects and non-TSE-infected

subjects[[,]] ; ~~and is Cystatin C;~~ comparing the test amount of ~~polypeptide~~ cystatin C in the sample to a reference amount of cystatin C ~~polypeptide~~, wherein the reference amount of ~~polypeptide~~ cystatin C represents no TSE infection; and ~~determining whether the test amount is consistent with a diagnosis of TSE~~ wherein an increase of cystatin C in the body fluid of the subject indicates TSE.

33. (Currently Amended) A method of diagnosis of a transmissible spongiform encephalopathy (TSE) or the possibility thereof in a subject suspected of suffering from the TSE, which comprises subjecting a sample of body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum taken from the subject to mass spectrometry, thereby to determine a test amount of ~~a polypeptide~~ cystatin C in the sample, wherein the ~~polypeptide~~ cystatin C is differentially contained in the body fluid of TSE-infected subjects and non-TSE-infected subjects, ~~and is Cystatin C~~; comparing the test amount of ~~polypeptide~~ cystatin C in the sample to a reference amount of ~~polypeptide~~ cystatin C, wherein the reference amount of polypeptide represents no TSE infection; and wherein an increase in cystatin C in the body fluid of the subject indicates TSE. ~~determining whether the test amount is consistent with a diagnosis of TSE.~~

34. (Currently Amended) The method of claim 33, wherein the body fluid is ~~CSF~~ cerebrospinal fluid (CSF).

35. (Currently Amended) A method of diagnosis of a transmissible spongiform encephalopathy (TSE) or the possibility thereof in a bovine subject suspected of suffering from the TSE, which comprises determining a test amount of a polypeptide in a sample of body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum taken from the subject, wherein the polypeptide is differentially contained in the body fluid of TSE-infected bovine subjects and non-TSE-infected subjects, and ~~is a~~ wherein the polypeptide is selected from the group consisting of a hemoglobin, a hemoglobin chain, ~~or~~ a truncated chain ~~or~~ and a fragment thereof which exhibits an immunological reaction to an antibody to bovine hemoglobin; comparing the test amount of the polypeptide in the sample to a reference amount of the polypeptide, wherein the reference amount of polypeptide represents no TSE infection; and ~~determining whether the test amount is consistent with a diagnosis of TSE~~ wherein an increase in the polypeptide in the body fluid of the subject indicates TSE.

36. (Currently Amended) A method of diagnosis of a transmissible spongiform encephalopathy (TSE) or the possibility thereof in a bovine subject suspected of suffering from the TSE, which comprises subjecting a sample of body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum taken from the subject to mass spectrometry, thereby to determine a test amount of a polypeptide in the sample, wherein the polypeptide is differentially contained in the body fluid of TSE-infected bovine subjects and non-TSE-infected subjects, ~~and~~ wherein the polypeptide is a hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof which

exhibits an immunological reaction to an antibody to bovine hemoglobin; comparing the test amount of the polypeptide in the sample to a reference amount of the polypeptide, wherein the reference amount of polypeptide represents no TSE infection; and ~~determining whether the test amount is consistent with a~~ wherein an increase in the polypeptide in the body fluid of the subject indicates TSE diagnosis of TSE.

37. (Currently Amended) A method of providing an indication of a transmissible spongiform encephalopathy (TSE) or the possibility or progress thereof in a subject liable to suffer from the TSE, which comprises use as a marker of a level of at least one polypeptide that has a molecular weight ~~in the range of from 1,010-31,800~~, of about 1010, 1100, 1125, 1365, 3295, 3645, 3890, 3970, 3990, 4030, 4294, 4315, 4436, 4478, 4780, 5820, 6200, 6700, 7520, 7574, 7630, 7770, 7930, 7975, 7980, 8020, 8600, 8936, 9107, 9145, 9185, 9454, 9950, 10075, 10220, 10250, 11600, 11730, 11800, 13375, 13550, 14043, 15000, 15200, 15400, 15600, 15900, 17839, 30000, 31000 or 31800 Da that is measurable or detectable ~~in the body tissue~~ by mass spectrometry and is differentially contained in ~~the~~ a body fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum of TSE-infected subjects and non-TSE-infected subjects, wherein the amount of polypeptide in a sample is compared to a reference amount of polypeptide, wherein the reference amount of polypeptide represents no TSE infection.

38. (Original) The method of claim 37, wherein said at least one polypeptide is

selected from those having a respective molecular weight of about 1010, 1100, 1125, 1365, 3645, 4030, 3890, 5820, 7520, 7630, 7980, 9950, 10250, 11600, 11800, 15000, 15200, 15400, 15600, 15900, 30000, 31000 and 31800 Da.

Claim 39. (Canceled)

40. (Currently Amended) A method of providing an indication of a transmissible spongiform encephalopathy (TSE) or the possibility or progress thereof in a subject liable to suffer from the TSE, which comprises use as a marker of a level of cystatin C measurable or detectable ~~in a sample of body tissue~~ by mass spectroscopy and is differentially contained in ~~the~~ a body ~~tissue~~ fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum of TSE-infected subjects and non-TSE-infected subjects wherein the amount of cystatin C in the sample is compared to a reference amount of cystatin C, wherein the reference amount of cystatin C represents no TSE infection.

41. (Currently Amended) The method of claim 40, wherein the body ~~tissue~~ fluid is from a human subject.

42. (Currently Amended) The method of claim 40, wherein the body ~~tissue~~ fluid is cerebrospinal fluid (CSF).

43. (Currently Amended) A method of providing an indication of a transmissible spongiform encephalopathy (TSE) or the possibility or progress thereof in a bovine subject liable to suffer from the TSE, which comprises use as a marker of a level of a hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof which exhibits an immunological reaction to an antibody to bovine hemoglobin, said level being measurable or detectable ~~in a sample of body tissue~~ by mass spectroscopy, and said hemoglobin, hemoglobin chain or truncated chain or fragment thereof being differentially contained in ~~the~~ a body ~~tissue~~ fluid selected from the group consisting of cerebrospinal fluid (CSF), blood, plasma and serum of bovine TSE-infected subjects and non-bovine non-TSE-infected subjects, wherein the amount of hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof in the sample is compared to a reference amount of hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof, wherein the reference amount of hemoglobin, a hemoglobin chain or a truncated chain or a fragment thereof represents no TSE infection.

44. (Original) The method of claim 43, wherein said hemoglobin, hemoglobin chain or truncated chain or fragment thereof has a molecular weight determinable by mass spectroscopy of about 15000 Da, 7500 Da or 3000 Da.

45. (Currently Amended) The method of claim 43, wherein the sample of body ~~tissue~~ fluid is plasma.

46. (Currently Amended) The method of claim 43, wherein the sample of body ~~tissue~~ fluid is from a living animal.

47. (Withdrawn) A bovine animal, or herd of said animals, that has or have been subjected to a test as defined in claim 43 and found to be free of a transmissible spongiform encephalopathy (TSE).